MegOhmMeters[™]





CAT III 600 V

Fluke 1550B 5 kV MegOhmMeter

- Standard test voltages of 250 V, 500 V, 1000 V, 2500 V and 5000 V
- Additional test voltages available in 50 volt steps from 250 to 1000 volts, 100 volt steps from 1000 to 5000 volts
- Measures up to one Teraohm
- Warning voltage function alerts the user that line voltage is present and gives the voltage reading up to 600 V ac or dc
- Automatic calculation of dielectric absorption and polarization index with no setup
- Guard system eliminates effect of surface leakage current on highresistance measurements
- Large digital/analog LCD delivers detailed measurement data
- Measures cable or insulation capacitance
- Measures leakage current
- Ramp function (0 to 5000 V dc) for breakdown testing
- 99 minute timer for timed tests
- Automatically stores test data in up to 99 locations that user can name for quick recall later
- Rechargeable batteries
- Includes FlukeView® Forms Basic software and optical interface cable for downloading to a Windows® PC
- Custom soft case for tester and accessories
- Includes heavy-duty leads, probes and alligator clips
- Two-year warranty



CAT III 1000 V, CAT IV 600 V

1587/1577 Insulation Multimeters

- Two products in one: Powerful Insulation Tester and full-featured Multimeter
 - Provides maximum versatility for troubleshooting and preventative maintenance
- Ideal for work on motors, cables, and switchgear
- Large display with backlight
- Filter for motor drive measurements (1587 only)
- Insulation test (1587: 0.01 M Ω to 2 G Ω), (1577: 0.1 M Ω to 600 M Ω)
- Insulation test voltages (1587: 50 V, 100 V, 250 V, 500 V, 1000 V), (1577: 500 V, 1000 V) for many applications

- Live circuit detection prevents insulation test if voltage > 30 V is detected for added user protection
- protection

 Auto-discharge of capacitive voltage for added user protection
- AC/DC voltage, dc milliVolts, ac/dc milliAmps, Resistance (0.1 Ω to 50 M Ω), Continuity
- Capacitance, Diode Test, Temperature, Min/Max, Frequency (Hz) (1587 only)
- Auto power off to save battery power
- Accepts optional Fluke TPAK[™] magnetic hanging system to free your hands for other work
- Made in USA
- · Three-year warranty



CAT III 1000 V, CAT IV 600 V

1507/1503 Insulation Testers

- Ideal for many troubleshooting, commissioning, and preventative maintenance applications
- Insulation test range: (1507: 0.01 M Ω to 10 G Ω), (1503: 0.1 M Ω to 2000 M Ω)
- Insulation test voltages: (1507: 50 V, 100 V, 250 V, 500 V, 1000 V), (1503: 500 V, 1000 V)
- Automatic calculation of Polarization Index and Dielectric Absorption Ratio saves both time and money (1507 only)
- Compare (Pass/Fail) function makes repetitive tests simple and easy (1507 only)
- Remote test probe makes repetitive or hard-to-reach testing easier

- Live circuit detection prevents insulation test if voltage > 30 V is detected for added user protection
- Auto-discharge of capacitive voltage for added user protection
- AC/DC voltage: 0.1 V to 600 V
- 200 mA Continuity
- Resistance: 0.01 Ω to 20.00 $K\Omega$
- Auto power off to save battery power
- Accepts optional Fluke TPAKTM magnetic hanging system to free your hands for other work
- Four AA alkaline batteries (NEDA 15 A or IEC LR6) for at least 1000 insulation tests
- One-year warranty

Current Clamp Accessories for Scopes, Power Analyzers and DMMs



i200s AC Current Clamp

 AC current up to 200 A, 40 Hz to 10 kHz bandwidth, mV output, available with BNC connection or BNC to banana adapter for DMMs



i400s AC Current Clamp

- Measures up to 400 A ac when used with a scope or power quality meter
- CAT IV 600 V, CAT III 1000 V safety rating
 - Can be used with DMMs with optional PM9081/001 BNC/ Banana adapter



i1000s AC Current Clamp

- AC current 100 mA to 1000 A rms continuous, 1400 A rms peak in 3 ranges
- BNC connection



i2000 Flex AC Current Clamp

- Flexible probe for hard to reach places, ac current to 2000 A, 1 Hz to 20 kHz bandwidth, maximum conductor size 178 mm (6.5 in.) diameter
- BNC connection with BNC to banana adapter for DMMs



i3000s AC Current Clamp

- AC current from 1 A to 2400 A continuous in 3 ranges, 3000 A for 30 minutes
- BNC connection with BNC to banana adapter for DMMs

Handheld Multimeter Feature Chart









		0.0.0	0 -0	3
Models	Industrial troubleshooting 87 V	4-20 mA loop diagnostics 789	Water and chemical resistant 27	True-rms and built-in thermometer 179
Basic features				
True-rms readings	ac	ac		ac
Basic dc accuracy	0.05 %	0.1 %	0.1 %	0.09 %
Wide bandwidth	20 kHz	0.1 70	0.1 70	0.00 70
Auto/manual ranging	•	•	•	•
Digits	4-1/2	3-1/2	3-1/2	3-1/2
Counts	6000/20000	4000	3200	6000
Measurement	0000/20000	1000	0200	0000
Voltage ac/dc	1000 V	1000 V	1000 V	1000 V
Current ac/dc	10 A	1 A	10 A	10 A
Motor Drive (ASD) Measurements	10 /1	171	10 11	10 11
Resistance	50 MΩ	40 MΩ	32 MΩ	50 MΩ
Frequency	200 kHz	20 kHz	32 Wisz	100 kHz
Capacitance	10,000 μF	20 Miz	<u> </u>	10,000 µF
Temperature	1090°С			400 °C
dB	1000 0			100 0
Conductance	50 nS		32 nS	
Duty cycle/pulse width	•		02 115	
Continuity with beeper	•	•	•	•
Diode test	•	•	•	•
Display	-	-		
Dual display		•		
Analog bargraph		•	•	•
Backlight	Two level	•		•
Diagnostics and data	1110 10101			
Min-Max recording	•	•	•	•
Min-Max recording/with time stamp				
Fast Min-Max	250 μs			
Display Hold/Auto (Touch) Hold	•	•	•	•
Relative reference	•	•	•	
RS-232 interface		•		
Data logging		with PC		
Other features				
Automatic selection, VChek				
Real time clock				
Overmolded case, integrated holster		•		•
Removable holster	•			
Separate battery door	•	•	•	•
Completely sealed/watertight			•	
Operating temperature range	-20 °C, 55 °C	-20 °C, 55 °C	-40 °C, 55 °C	-10 °C, 50 °C
4-20 mA source	,,,,,	•	1, 11	
24 V loop supply		•		
RPM			1	
Warranty and electrical safety			·	·
Warranty	Limited lifetime	3 years	Limited lifetime	Limited lifetime
Dangerous voltage indication	•	•		•
CAT II measurements				
CAT III measurements	1000 V	1000 V	1000 V	1000 V
CAT IV measurements	600 V	600 V		600 V













	STATE OF THE PARTY.	0.0,0	0 \$0			
Models	Field service or bench repair 77 IV	Non-contact voltage detection 117	HVAC and electrical troubleshooting 116	Field service Technician 115	Basic Electrical 114	
Basic features						
True-rms readings		ac	ac	ac	ac	
Basic dc accuracy	0.3 %	0.5 %	0.5 %	0.5 %	0.5 %	
Wide bandwidth						
Auto/manual ranging	•	•	•	•		
Digits	3-1/2	3-1/2	3-1/2	3-1/2	3-1/2	
Counts	6000	6000	6000	6000	6000	
Measurement						
Voltage ac/dc	1000 V	600 V	600 V	600 V	600 V	
Current ac/dc	10 A	10 A	600 μA	10 A		
Motor Drive (ASD) Measurements	1011	10.11	υσο μι.	1011		
Resistance	50 MΩ	40 MΩ	40 MΩ	40 MΩ	40 MΩ	
Frequency	100 kHz	50 kHz	50 kHz	50 kHz	40 14177	
Capacitance	10,000 µF	10,000 μF	10,000 μF	10,000 μF		
Temperature	Ιο,οοο μι	10,000 μ1	10,000 μ1 400 °C	10,000 µг		
dB			1 00 0			
Conductance						
Duty cycle/pulse width	1					
Continuity with beeper	•		•	•	•	
Diode test	•	 	•	•	<u> </u>	
	•	•	•	•		
Display						
Dual display			_		_	
Analog bargraph	•	•	•	•	•	
Backlight	•	•	•	•	•	
Diagnostics and data	_			_		
Min-Max recording	•	•	•	•	•	
Min-Max recording/with time stamp						
Fast Min-Max						
Display Hold/Auto (Touch) Hold	•	•	•	•	•	
Relative reference RS-232 interface						
	†	+				
Data logging						
Data logging Other features						
Data logging Other features Automatic selection, VChek		•				
Data logging Other features Automatic selection, VChek LoZ		•	•		•	
Data logging Other features Automatic selection, VChek LoZ Overmolded case, integrated holster	•	•		•		
Data logging Other features Automatic selection, VChek LoZ Overmolded case, integrated holster Removable holster		•	•	•	•	
Data logging Other features Automatic selection, VChek LoZ Overmolded case, integrated holster Removable holster Separate battery door	•	•				
Other features Automatic selection, VChek LoZ Overmolded case, integrated holster Removable holster Separate battery door Completely sealed/watertight	•	•	•	•	•	
Other features Automatic selection, VChek LoZ Overmolded case, integrated holster Removable holster Separate battery door Completely sealed/watertight Operating temperature range		•	•	•	•	
Data logging Other features Automatic selection, VChek LoZ Overmolded case, integrated holster Removable holster Separate battery door Completely sealed/watertight Operating temperature range 4-20 mA source	•	•	•	•	•	
Data logging Other features Automatic selection, VChek LoZ Overmolded case, integrated holster Removable holster Separate battery door Completely sealed/watertight Operating temperature range 4-20 mA source 24 V loop supply	•	•	•	•	•	
Data logging Other features Automatic selection, VChek LoZ Overmolded case, integrated holster Removable holster Separate battery door Completely sealed/watertight Operating temperature range 4-20 mA source 24 V loop supply RPM	•	•	•	•	•	
Data logging Other features Automatic selection, VChek LoZ Overmolded case, integrated holster Removable holster Separate battery door Completely sealed/watertight Operating temperature range 4-20 mA source 24 V loop supply RPM Warranty and electrical safety	•	•	•	•	•	
Data logging Other features Automatic selection, VChek LoZ Overmolded case, integrated holster Removable holster Separate battery door Completely sealed/watertight Operating temperature range 4-20 mA source 24 V loop supply RPM Warranty and electrical safety Warranty	•	•	•	•	•	
Data logging Other features Automatic selection, VChek LoZ Overmolded case, integrated holster Removable holster Separate battery door Completely sealed/watertight Operating temperature range 4-20 mA source 24 V loop supply RPM Warranty and electrical safety	-10 °C, 50 °C	-10 °C, 50 °C	-10 °C, 50 °C	-10 °C, 50 °C	-10 °C, 50 °C	
Data logging Other features Automatic selection, VChek LoZ Overmolded case, integrated holster Removable holster Separate battery door Completely sealed/watertight Operating temperature range 4-20 mA source 24 V loop supply RPM Warranty and electrical safety Warranty	-10 °C, 50 °C	-10 °C, 50 °C	-10 °C, 50 °C	-10 °C, 50 °C	-10 °C, 50 °C	
Data logging Other features Automatic selection, VChek LoZ Overmolded case, integrated holster Removable holster Separate battery door Completely sealed/watertight Operating temperature range 4-20 mA source 24 V loop supply RPM Warranty and electrical safety Warranty Dangerous voltage indication	-10 °C, 50 °C	-10 °C, 50 °C	-10 °C, 50 °C	-10 °C, 50 °C	-10 °C, 50 °C	

Clamp Meters



Fluke 345 Power **Quality Clamp** Meter

Quickly troubleshoot power quality issues with the easy-to-use combination of a power quality meter, current clamp, and data logger

- True rms ac and dc clamp-on current measurements up to 2000 A (1400 A rms)
- Make effective measurements on variable speed drives and other noisy equipment with the help of the switchable low-
- pass filter Highest safety rating in the industry – 600 V CAT IV / 1000 V CAT III
- Troubleshoot onscreen with color display of waveforms, harmonics, and recorded data
- Investigate intermittent issues with logging of min, max, and average measurements
- · Measures V, A, Hz, CF,THD, DF, W, VA, VAR, kWh and Power Factor even on distorted waveforms
- · Assess the effects of loads with dc ripple measurement
- · Quantify demand with three-phase power capability for balanced loads
- · Inrush mode for troubleshooting nuisance circuit breaker tripping
- View graphs and generate reports with included Power Log software





- · Auto shut-off
- Small body and jaws fit into tight spaces and vour hand

Fluke 336, 337

Clamp Meters

- · Display hold
- Continuity beeper
- 0-600.0 V dc range • 0-600.0 V true-rms ac
- Backlight
- 0-6000 Ω range
- In-rush current function for measuring starting current on motors, lighting, etc.
- · Soft carrying case included
- Three-year warranty
- 0-600.0 A range (336) • 0-999.9 A range (337)
- · Frequency measurement range (ac only) 5 to 400 Hz (337)





Fluke 333, 334, 335 **Clamp Meters**

- Auto shut-off
- · Small body and jaws fit into tight spaces and your hand
- Display hold
- 0-600.0 V ac and dc ranges
- Continuity beeper · Soft carrying case
- included Three-year warranty
- 0-400.0 A range (333)
- 0-600.0 A range (334, 335)
- 0-600.0 Ω range (333) • 0-6000 Ω range
- (334, 335)• Backlight (334, 335)
- True-rms ac range 0-600.0 V (335) · In-rush current function for measuring starting

ing, etc. (334, 335)

current on motors, light-

CAT III 600 V

Fluke 321, 322 **Clamp Meters**

- New smaller size fits easily into tight places and in a tool belt or pocket
- Precise low current measurements with 10 mA resolution (322) • Better than 2 % basic
- accuracy
- Continuity beeper
- · Display hold Soft carrying case included
- Two-year warranty
- 0-400.0 A ac range • 0-40.00 A ac range
- (322)• 0-400.0 Ω range • 0-400.0, 0-600 V ac
- range • 0-400.0, 0-600 V dc range (322)

Fluke 902 **True RMS HVAC Clamp Meter**

- Designed specifically for HVAC applications
- Capacitance to 1000 μF
- DC Current to 200 uA
- Contact Temperature to
- 0 to 600.0 A ac current • 0 to 600.0 V ac and dc ranges
- 0 to 9999 Ω range
- True RMS and low-pass
- filter
- Min/Max/Hold Backlight
- Soft carrying case included
- · Auto power off
- Three-year warranty



Power Quality Analyzers

CAT III 1000 V, CAT IV 600 V

Fluke 435 **Three-Phase Power Quality Analyzer**

- · Pinpoint power problems faster, safer, and in greater detail
- Locate, predict, prevent, and troubleshoot problems in power distribution systems
- Records all your necessary values in a three-phase system
- · Highest safety rating in the industry
- · Four voltage and four current channels · Minimal setup required with intuitive menus
- · Captures waveform data on all phases simultaneously • System-Monitor: Six power quality parameters on one dashboard
- · Automatic Transient display: Don't miss an event
- Auto Trend: Don't waste time setting up recordings
- · Rugged, handheld recorder
- Seven hours operating time per charge on NiMH battery pack
- Transfer data files to your PC for reporting and analysis using FlukeView® Forms Software

Fluke 1735 Power Logger

NEC compliant load studies, energy consumption testing, and general power quality logging

- Record loading according to NEC 30-day load study requirement
- Monitor demand with 1 second to 15 minutes or user-defined averaging
- Prove the benefit of efficiency improvements with energy consumption
- · Measure harmonic distortion caused by electronic loads
- · Improve reliability by capturing voltage dips and swells from load switching
- Easily confirm instrument setup with color display of waveforms and trends
- Measure all three phases and neutral with included 4 flexible current probes View graphs and generate reports with
- included Power Log software Compact, rugged design with IP65 case,

600 V CAT III and 2-year warranty

Indoor Air Quality



Fluke 975 AirMeter™

- Simultaneously displays temperature (to 50 °C), relative humidity (to 90 %), CO₂ (to 5000 ppm), CO (to 500 ppm)
- Measures air velocity (0 to 3000 fpm)
- Calculates wet bulb and dewpoint temperatures and air flow
- · Determine % of outside air using temperature or CO₂ levels
- Automatically compensates for barometric pressure
- Single-point (99 points) and continuous data logging (25,000 records)
- Min/Max/Ave readings
- Rugged holster
- FlukeView® Forms software included
- Rechargeable Li-Ion battery and (3) AA batteries for backup
- Hard carrying case included Two year warranty

Fluke 971 **Temperature Humidity Meter**

- Backlit dual display of humidity (to 95 %) and temperature (to 60 °C)
- ± 0.5 °C and humidity accuracy of $\pm 2.5 \%$ · Calculates dew point and wet

Temperature accuracy of

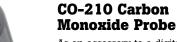
- bulb temperatures 99 record storage capacity
- Ergonomic design with belt clip and protective holster · Quick-response capacitive sensor (< 60 sec settling time)
- with twist-open protective cover • Min/Max/Avg data hold
- Low battery indicator • One year warranty

- Fluke 922 **Airflow Meter** • Measures differential (to 16 in
- H20), air velocity (to 16,000 fpm) and flow readings (to 99.999 cfm) • Measure ambient air
- temperatures (to 50 °C)
- · Rugged and easy to use • User-defined duct shape and size for maximum airflow
- accuracy · Convenient colored hoses help · Bright, backlit display
- Min/Max/Average/Hold functions
- · Auto power off Soft carrying case included
- Hard carrying case, 12" Pitot tube, and TPAK Meter Hanging Kit included with Fluke-922/Kit
- Two year warranty

Carbon Monoxide Testers

CO-220 Carbon **Monoxide Meter**

The CO-220 Carbon Monoxide Meter makes it easy to take quick and accurate measurements of CO levels. A large, backlit LCD display shows CO levels from 0 to 1000 PPM. The MAX hold function stores and displays the maximum CO level.



As an accessory to a digital multimeter with dc mV inputs, the Fluke CO-210 measures CO levels from 0 to 1000 PPM. As a stand-alone device, the LED indicator and beeper trigger with increasing frequency as the CO level rises.



CO-205 **Aspirator Kit**

Allows flue gas samples up to $370 \, ^{\circ}\text{C}$ (700 $^{\circ}\text{F}$) to be drawn with the CO-210 or CO-220 for carbon monoxide

FLUKE ®



Calibrators



Fluke 707 **Loop Calibrator**

- · Innovative output adjustment dial with 1 μA and 100 μA resolution
- · Large display and simple, quick-click interface for easy one-handed operation
- Simultaneous mA and % readout for quick, easy, interpretation of readings
- mA accuracy of 0.015 %, 1μA resolution for mA source, simulate and mea-
- Push button 25 % steps for fast, easy linearity checks
- 0-100 % "span check" for fast confirmation of zero and span
- Selectable slow ramp, fast ramp, and auto step to provide smooth new outputs for valve slewing and loop functional tests
- 24 volt internal loop supply, so you can power and read a transmitter at the same time without carrying a DMM
- Measures V dc to 28 V • Single 9 V battery that is
- easily changed • 0-20 mA or 4-20 mA
- default start up modes
- HART™ mode connects 250 W resistor in series with 24 V loop for compatibility with HART communicators

Fluke 707Ex **Intrinsically Safe Loop Calibrator**

• All of the great features of the 707 plus certification in accordance with the ATEX directive (Ex II 2 G EEx ia IIC T4) and Factory Mutual W.I. Class 1, Div. 2 Groups A-D

ProcessMeter™ Test Tools

8.000

Fluke 789 ProcessMeter™

- 24 V loop power supply
- HART mode setting with loop power(adds 250 ohm
- · Double-sized, dual display
- 20 mA drive into 1200 ohms Backlight with two
- brightness settings • 0-100 % mA Span Check
- buttons to toggle between 4 and 20 mA • Infrared I/O serial port
- compatible with FlukeView® Forms Software
- Improved battery power with four AA batteries
- IEC 610, CAT IV 600V
- Plus all the proven 787 features

Fluke 787 ProcessMeter™

- · Simultaneous mA and % of scale readout on mA output
- 25 % Manual Step plus Auto Step and Auto Ramp on mA output
- Min/Max/Average/Hold/ Relative modes
- · Externally accessible battery for easy changes
- CAT III 1000 V safetyrated, true-rms multimeter



Voltage Detectors



Fluke 1AC-II and 1LAC-II The most innovative pocketsized voltage detectors

The next generation Fluke 1AC-II and 1LAC-II ac voltage detectors, with VoltAlert™ non-contact voltage detection, are easy to use - just touch the tip to a terminal strip, outlet, or cord. When the tip glows red and the unit beeps, you know there's voltage in the line. Electricians, maintenance, service, safety personnel, and homeowners can quickly test for energized circuits and defective grounds on the factory floor, in the shop, or at home.

- The 1AC-II continually tests its battery and its circuit integrity with a periodic double flash visual indication using Fluke Voltbeat™ technology.
- The 1AC-II and 1LAC-II are Category IV 1000 V overvoltage rated products for added user protection, the highest rated of their kind.
- Voltage detection of 90 to 1000 V ac. as well as a 24 to 1000 V ac control circuit model.
- They are rugged, reliable, and have a two-year



LVD2 Volt Light Pen Style non-contact

AC voltage detector and bright white LED flashlight. Combines a bright LED light and volt detector in one, easy to use pen-style design. Detects voltage from 90V to 600V AC from 1 to 5 feet away. Cat IV rated and has a one year warranty. Dimensions: (H x W x D) are 23 cm x 14 cm x 2.5 cm.

- · Dual Sensitivity
- LED light with 100,000 hour life
- Detects from 90 to 600 Rated to CAT IV 600 V
- Dual Levels of Detection
- Blue indicates proximity to AC Voltage source
- · Red indicates you're at the



LVD1 Non-Contact AC Voltage Detector and LED Flashlight

Combines a bright LED light and volt detection in one convenient. compact design.

- · Exclusive dual-sensitivity detector
- Blue light means you're close
- · Red light means you're at the source
- · Detects voltage from 40 V to 300 V ac
- · Comes with a versatile clip to secure light to a pocket, hat or even a panel door
- One-vear warranty

Thermal Imaging



Fluke-Ti20 Thermal Imager

The thermal imager for everyday maintenance and inspection.

High performance, designed for industrial use

- 128 x 96 detector provides a clear thermal image with accurate temperature measurements up to
- · Fully radiometric for detailed temperature analysis and tracking of critical components
- · Protected against dust and moisture (IP54 rated) to withstand harsh industrial environments
- · Provides 3 hours continuous operation per battery charge (2 battery packs included)

Easy to use

- · Large color LCD displays uncluttered image with data and routing instructions
- · Facilitates one-handed point-andshoot image capture operation
- Assists fast inspections with clear on-screen step-by-step routing instructions

Complete solution offering lowest cost of ownership

- Includes InsideIR[™] software for unlimited use by every member of the maintenance team (no software license fees)
- Comes complete with all necessary accessories and professional application training material to ensure a fast return on investment

Basic Specifications

- Field of view (FOV) 20° horizontal x 15° vertical
- Spatial resolution: (IFOV) 2.73 mrad Min focus distance: 0.15 m
- Thermal sensitivity (NETD): 200mK (≤ 0.2 °C at 30 °C)
- Detector type: 128 x 96 Focal Plane Array, Uncooled Microbolometer
- · Calibrated temperature range: -10 °C to 350 °C
- Accuracy: ± 2 °C or 2 % (whichever is greater)
- Palettes: Grayscale, reverse grayscale, rainbow, ironbow • Storage medium: 50 images
- internal flash · Software InsideIR: Full analysis
- and reporting software included
- Warranty: 1 year

Electrical Testers



CAT IV 600 V

Fluke T+PRO **Electrical Tester**

· Safer than traditional solenoid · 3 forms of ac/dc voltage detection: lights, beeper,

vibration for added user

- protection and convenience Still indicates live voltage without battery power for added user protection
- Extra-heavy-duty, replaceable test leads for added durability
- CAT IV 600V, CAT III 1000V rated for added user protection Continuity beeper, GFCI Trip,
- Flashlight Backlit LCD display for easier viewing
- Resistance, Rotary Field Indication and Display Hold
- Replaceable test probes for added convenience
- · Probe storage on back for added convenience
- · Probe holder for easier testing Hazardous voltage warning
- light for added user protection Test lead strap included for
- better test lead management AC/DC Voltage: 12 V – 600 V on LED bar, 10.2 V – 600 V
- LCD Resolution: 0.1 V for voltages < 50 V, 1V for voltages >= 50 V Auto-off to save battery power
- 2 AAA Batteries

on LCD

2-vear warrantv



Fluke T+

- · Safer than traditional solenoid
- · 3 forms of ac/dc voltage detection: lights, beeper, and vibration for added user protection and convenience
- Still indicates live voltage added user protection
- test leads for added durability
- rated for added user protection • Continuity beeper, GFCI Trip,
- · Replaceable test probes for
- · Probe storage on back for
- · Probe holder for easier testing
- Hazardous voltage warning
- Test lead strap included for better test lead
- AC/DC Voltage: 12 V 600 V

CAT IV 600 V

Electrical Tester

- without battery power for
- Extra-heavy-duty, replaceable
- CAT IV 600 V, CAT III 1000 V
- Flashlight
- added convenience
- added convenience
- light for added user protection
- management
- Auto-off to save battery power
- · 2 AAA Batteries
- 2-year warranty



FLUKE ®

CAT III 600 V (T5-600) CAT III 1000 V (T5-1000)

Fluke T5-600, T5-1000 **Electrical Testers**

- Digital display
- OpenJaw™ Current to 100 amps ac
- 1000 ohm range, continuity beeper
- Sleep mode to conserve battery life • H5 holster (optional) attaches
- to tool belt
- Two-year warranty Automatic readings up to 600 volts ac or dc (T5-600)
- Automatic readings up to 1000 volts ac or dc (T5-1000)



CAT III 600 V

Fluke 7-600 **Electrical Tester**

- 4000 count digital display
- 400 Ω range, continuity beeper
- TL75 test leads included
- · High visibility vellow housing Sleep mode
- · Auto selection of ohms or volts
- Two-year warranty
- Automatic readings of up to 600 volts ac or dc (4.5-600)

Digital Thermometers

Model Number	Fluke 51 Series II	Fluke 52 Series II	Fluke 53 Series II	Fluke 54 Series II		
	Field unit with lab	oratory accuracy	Field unit with laboratory accuracy and certification			
	High accuracy contact temperature me for analysis and reports using FlukeV					
		520		540		
Recommended uses	conformance and manufacturing pro to monitor safe and unsafe temperatu	atrol to ensure product is within manu cesses, HVAC applications to monitor re levels. Biomedical and medical lab al industry applications where precis	air temperature and equipment, and applications where temperature mea	food processing and preparation asurement is critical and chemical		
Thermocouple types	K, J, 1	Г, Е	K, J, T, E, N, R, S			
Temperature range	J-type: -210 °C to 1200 ° K-type: -200 °C to 1372 ° T-type: -250 °C to 400 E-type: -150 °C to 1000	°C (-328 °F to 2501 °F); °C (-418 °F to 752 °F);	J-type: -210 °C to 1200 °C (-346 °F to 2192 °F); K-type: -200 °C to 1372 °C (-328 °F to 2501 °F); T-type: -250 °C to 400 °C (-418 °F to 752 °F); E-type: -150 °C to 1000 °C (-238 °F to 1332 °F) N-type: -200 °C to 1300 °C (-392 °F to 2373 °F); R and S-Type: 0 °C to 1767 °C (32 °F to 3212 °F)			
Number of inputs	Single	Dual	Single	Dual		
MIN/MAX/AVG Recording with Time Stamp	Yes	3	Yes			
Differential (T1-T2) readout	-	Yes	-	Yes		
Datalogging up to 500 points	-		Ye	S		
Time stamp	Relative	time	Time of day			
Temperature scale	ITS-	90	ITS-90			
Applicable standards	NIST-	175	NIST-175			
Display resolution	0.1 °C / °F/ K < 1000	1 °C/ °F/ K ≥ 1000 °	0.1 °C / °F/ K < 1000 1 °C/ °F/ K ≥ 1000 °			
Battery life (typical)	1000 h	iours	1000 hours			
Dual display w/backlight	Yes	3	Yes			
IR data port for PC interface			Yes			
FlukeView® Forms	-		Yes			
Approvals	CE, CSA, TUV	/ (pending)	CE, CSA, TUV (pending)			

Precision Infrared Thermometers

Model Number	Fluke 572	Fluke 574	Fluke 576		
	The precision IR thermometer for vital analysis	The precision IR thermometer with data logging for vital analysis	Photographic infrared thermometer with data logging		
	Precision optics feature unique coaxial laser sighting that indicates the diameter of the target area.	Precision optics feature unique coaxial laser sighting that indicates the diameter of the target area.	Photographic infrared thermometer documents temperature and images.		
Recommended uses	Predictive and preventive maintenance, electrical, process monitoring, heavy equipment, quality assurance programs	Predictive and preventive maintenance, electrical, process monitoring, heavy equipment, quality assurance programs	Predictive and preventive maintenance, electrical, process monitoring, heavy equipment, quality assurance programs where documentation is needed		
Temperature range	-30 °C to 900 °C (-25 °F to 1600 °F)	-30 °C to 900 °C (-25 °F to 1600 °F)	-30 °C to 900 °C (-25 °F to 1600 °F)		
Distance to target	Up to 10.5 m (35 ft)	Up to 10.5 m (35 ft)	Up to 10.5 m (35 ft)		
Optical resolution (D:S)	60:1	60:1	60:1		
Accuracy +/- % of reading	\pm 0.75 % of reading or \pm 0.75 °C (± 1.5 °F) whichever is greater	\pm 0.75 % of reading or \pm 0.75 °C (± 1.5 °F) whichever is greater	\pm 0.75 % of reading or \pm 0.75 °C (± 1.5 °F) whichever is greater		
Laser sighting	True Dimension™ Sighting shows spot diameter	True Dimension™ Sighting shows spot diameter	True Dimension™ Sighting shows spot diameter		
Emissivity	Adjustable	Adjustable	Adjustable		
Data logging		100 data points	100 data points + images		
Data output	-	RS-232 (includes PC software)	USB (includes PC software)		
Probe		Thermocouple K	Thermocouple K		
Certifications	CE, FDA/IEC Laser Caution notice	CE, FDA/IEC Laser Caution notice	CE, FDA/IEC Laser Caution notice		

The information in this document is a summary of specifications for the products listed. Please check the product data sheet for a complete list of specifications.

Infrared Thermometers



Model Number	Fluke 61	Fluke 62 Mini	Fluke 63	Fluke 66	Fluke 68	Fluke 68IS*	Fluke 561
	Compact entry level tool	Compact entry level tool	The professional's rugged diagnostic tool			Professional diagnos- tic tool with FM approval for use in hazardous locations	Contact and non- contact temperature measurement
	Small enough to fit in your pocket.	Small enough to fit in your pocket, includes a backlit display and a laser point to assist in sighting your target.				Same features as Fluke 68 plus rating for use where flammable gases are present.	Two-in-one thermometer, compatible with Type K thermo- couples
	□ • • •	F					5/3
Recommended uses	Short range troubleshooting work, electrical, HVAC and indus- trial applications	Short range troubleshooting work, electrical, HVAC and industrial applications	Professional Trades	Plant/General Maintenance, HVAC/R, Transportation, Diesel		Hazardous Locations (Petrochemical, Chemical)	Plant Maintenance, Electromechanical HVAC/R
Temperature range	-18 °C to 275 °C (0 °F to 575 °F)	-30 °C to 500 °C (-20 °F to 932 °F)	-32 °C to 535 °C (-25 °F to 999 °F)	-32 °C to 600 °C (-25 °F to 1100 °F)	-32 °C to 760 °C (-25 °F to 1400 °F)	-32 °C to 760 °C (-25 °F to 1400 °F)	-40 °C to 550 °C (-40 °F to 1022 °F)
Typical distance to target (spot)	Up to 2 m (6 ft)	Up to 2 m (6 ft)	Up to 2.5 m (7 ft)	Up to 4.5 m (15 ft)	Up to 7.5 m (25 ft)	Up to 7.5 m (25 ft)	Up to 2 m (6 ft)
Optical resolution (Distance:Spot or D:S)	8:1	10:1	12:1	30:1	50:1	50:1	12:1
Accuracy +/- % of reading	2 %	1.5 %	1 %	1 %	1 %	1 %	1 %
Sighting	Laser point	Laser point	Extra bright laser point	Extra bright laser point	Extra bright laser point	Extra bright laser point	Extra bright laser point
Emissivity	Pre-set 0.95	Pre-set to 0.95	Pre-set to 0.95	Adjustable	Adjustable	Adjustable	Adjustable (3 set- tings)
Data logging	-	-	-	12 data points	12 data points	12 data points	-
Probe	-	-	-	RTD (optional ac- cessory)	RTD (optional accessory)	RTD included	Includes K-type Velcro® thermo- couple pipe probe (compatible with all standard mini- connector K-type thermocouples)
Certifications	CE, FDA/IEC Laser Caution notice	CE, FDA/IEC Laser Caution notice	CE, FDA/IEC Laser Caution notice	CE, FDA/IEC Laser Caution notice	CE, FDA/IEC Laser Caution notice	CE, FM, FDA/IEC Laser Caution notice	CE, FDA/IEC Laser Caution notice

*Fluke 68 IS Intrinsically Safe, Class I, Division 1, Groups A, B, C, D Class I, Zone O, Aex ia IIC, T4 at 50 °C when used with 9 V alkaline battery. Factory Mutual Research is an approving organization in the United States and, while businesses in many countries accept its approvals, FM approval may not be sufficient in some locales. Acceptance of FM approval will be dependent on the particular company, its location, and local regulation. The information in this document is a summary of specifications for the products listed. Please check the product data sheet for a complete list of specifications.

Temperature Accessories

Thermometer converters for DMMs

80TK Thermocouple Module

Converts any DMM into a thermometer via standard banana plugs. Accepts K-type thermocouples with mini-connectors. Switch selectable for °C or °F. Use with interchangeable thermocouples described below. (Not for use with 7 Series Electrical Testers.) (One 80PK-1 Bead Probe included.)

Basic accuracy: 0.5 % ± 2 °C (0.5 % ± 3.6 °F)

Range: -50 °C to 1000 °C (-58 °F to 1832 °F)



80T-150U Universal **Temperature Probe**

High accuracy P-N junction probe converts any DMM with 10 $M\Omega$ input impedance into a thermometer. Switch selectable for °F or °C. For low voltage environments (under 30 V ac rms, 60 V dc). Suitable for air, surface and non-corrosive liquid measurement applications. (Not for use with 7 Series Electrical Testers.)

Basic accuracy: ±1 °C (1.8 °F), 0 °C to 100 °C.

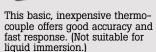
Range: -50 °C to 150 °C (-58 °F to 302 °F).



Designed for pipe surfaces from 6.4 mm ($^{1}/^{4}$ ") diameter to 34.9 mm ($^{1}/^{8}$ ") diameter.

- Spring-action jaw will not loosen over time, ensuring repeatable measurements
- For use with K-type instruments
- Measurement range: -29 °C to 149 °C (-20 °F to 300 °F)
- Repeatability: 0.56 °C (1 °F)

General Purpose Bead Probes 80PK-1 and 80PJ-1



- 80PK-1 is compatible with K-type thermometers; 80PJ-1 works with J-Type ther-
- Measurement range: -40 to 260 °C (-40 to 500 °F)



K-Type Flat Surface Probe 80PK-3A

Designed for measuring the temperature of flat or slightly convex surfaces, this K-type probe is ideal for hot rollers

- Exposed junction allows direct contact with the surface being measured
- · Measurement range: 0 to 260 °C (32 to 500 °F)



HVAC Probes 80PK-9 and 80PJ-9

- Sharp tip to pierce insulation, flat surface makes good contact with pipe
- 80PK-9 is compatible with K-type thermometers; 80PJ-9 operates with J-Type
- Measurement range: -40 to 260 °C (-40 to 500 °F)



Type-K Velcro Thermocouple **Temperature Probe** 80PK-11

- · Designed for hands-free measurement of HVAC temperature measuring applications
- Use multiple and leave in place for route based routine maintenance
- Use with any temperaturemeasuring instrument designed to accept Type-K thermocouples
- Measurement Range: -30 °C to 105 °C (-22 °F to Ž21 °F)



SureGrip™ 80PK-22 **Immersion Probe**

- · For use in liquids or gels, use also for general purpose
- Compatible with K-Type instruments
- Measurement range: -40 to 1090 °C (-40 to 1994 °F)
- 8.375 inch probe made from Alloy 600



SureGrip™ 80PK-24 Air Probe

- · Perforated baffle around the measurement bead for air and non-caustic gas measurements
- Compatible with K-Type instruments
- Measurement range: -40 to 816 °C (-40 to 1500.8 °F)
- 8.5 inch probe made from Inconel



SureGrip™ 80PK-25 and 80PT-25 Piercing Probes

- For general food service applications-designed for use in soft or semi-hard materials
- 80PK-25 is compatible with K-Type instruments; measurement range: -40 to 260 °C (-40 to 500 °F)
- 80PT-25 is compatible with T-Type instruments and is ideal for low temperature applications; measurement range: -196 to 350 °C (-321 to 662 °F)
- Soft rubber handle can be cleaned with soap and water
- 4 inch probe made from 316

for DMMs

AC Range:

Accuracy:

DC Range:

Conductor

Basic

Max

Size:

Output:

1-200 A

300 MCM

1 mA/Amp



SureGrip™ 80PK-26 Tapered Probe

- Use for general purpose surface and air measurements
- Compatible with K-Type instruments
- Measurement range: -40 to 816 °C (-40 to 1500 °F)
- 8 inch probe made from 304 stainless steel



SureGrip™ 80PK-27 **Industrial Surface Probe**

- · Heavy duty industrial grade probé · For flat or slightly curved
- surfaces · Low conductivity stainless steel housing minimizes
- thermal shunting • Compatible with K-Type instruments
- Measurement range: -127 to 600 °C (-196 to 1112 °F)
- 8 inch probe made from 300

Current Measurement Accessories

i400

 $\leq 3\% + 0.5 \text{ A} \mid 2\% + 0.6 \text{ A} \mid 2\%$

1-400 A

1 mA/Amp

80i-600A

1 mA/Amp

1-600 A

i410

2-500 MCM or | 750 MCM or

1-400 A ac

1-400 A dc

1 to 1000 MCM 2 to 500 MCM 2 to 500 MCM

i1010

3.5 % + 0.5 A 2 % + 0.5 A

1 mV/Amp 1 mV/Amp

1-600 A ac

750 MCM or



Extension Wire Kits 80PK-EXT, 80PJ-EXT and 80PT-EXT

For extending and repairing J, K or T-type thermocouple wires.

- Kit includes 3 meters (approx. 9 feet) of thermocouple wire and 1 pair of male/female mini-connectors
- Maximum continuous exposure temperature: 260 °C (500 °F)
- 80PK-EXT is compatible with K-type thermometers: 80PJ-EXT is designed for J-Type thermometers, and 80PT-EXT is designed for T-type thermometers

Premium Cases and Holsters



- Suitable for T3 and T5 Testers
- Rugged fabric holster includes flap for lead storage and built-in belt loop



- Suitable for 330 Series Clamp Meters
- Rugged fabric holster includes flap for lead storage and built-in belt loop



C550

- · Suitable for multiple meters and accessories
- Large zippered storage compartment with 25 pockets



C116 Soft Carrying Case

- Includes adjustable padded space with a moveable Velcro divider for protection of two test tools, such as a DMM and a Current Probe
- Durable polyester 600D case construction for long life
- Compatible with Fluke 20, 70, 11X, 170 Series DMMs and other similar format test tools
- One-year warranty

SureGrip[™] Probes, **Leads and Clips**



AC285 SureGrip™ **Alligator Clips**

- Multi-purpose tooth pattern grips anything from fine gauge wire to a 20 mm $(^3/_4$ in.) bolt
- Nickel-plated steel jaws
- Rated up to 10 A, CAT III, 1000 V CAT IV, 600 V



TPAK, ToolPak™ **Magnetic Meter Hanging** Solution

- Includes universal hanger clips (two), hook and loop straps (two lengths), adapter and strong magnet
- Attaches to back of 110, 170, 180 Series, 80 Series V DMMs, 1587/1577 and 1507/1503 testers, 724, 725 and 789 Process Calibrators, and 50 Series II Digital Thermometers



Starter Kit

Getting stared kit for electricians who already own a Fluke T5 Tester Included with kit:

- TP220 SureGrip test probes with removable comfort grips
- A285 SureGrip Large jaw alligator clips
- C33 Zippered soft case





TP220 SureGrip™ **Industrial Test Probes**

- Sharp, 12.7 mm (1/2 in.) stainless steel tip provides reliable contact
- · Flexible finger barrier improves grip
- Rated up to 10 A, CAT III, 1000 V CAT IV, 600 V

TL238 SureGrip™ Set

Kit includes two each:

explosion

for High Energy Environments

• TP238 Insulated HP Probes that help to lessen risk of arc flash

• TP280 Probe Extenders keep

away from live circuits

hands an additional 8 inches

TL224 Silicone Insulated Test

Leads with superior strain relief



FLUKE ®

TL220 SureGrip™ Industrial Test Lead Set

- · Starter kit for industrial applications
- Includes two each: AC220 alligator clips, TP220 test probes, TL222 test leads
- · Rated up to 10A, CAT III, 1000 V CAT IV, 600 V



TL223 SureGrip™ **Electrical Test Lead Set**

- Starter kit for electrical applications
- · Includes two each: AC220 alligator clips, TP1 test probes, TL224 test leads
- Rated up to 10A, CAT III, 1000 V CAT IV, 600 V

TL225 SureGrip™ Stray Voltage Adapter Test Lead Kit

The TL225 SureGrip™ Stray Voltage Adapter Test Lead Set provides a low impedance load a measured circuit, desensitizing the meter to low energy, spurious sources of interference also known as 'Stray' or 'Ghost' Voltage. When used with a compatible digital multimeter, it can be determined whether the circuits under test are energized or not.

- Set includes: SV225 Stray Voltage Eliminator TL224 SureGrip™ Silicone Test Lead Set (right to straight) TP220 SureGrip™ Test Probe Set C75 Accessory Case
- Rated CAT III 1000 V, CAT IV 600 V
- One-vear warrantv



10 Fluke Corporation 11

ScopeMeter® Test Tools













Fluke 192B/196B/199B/196C/199C

- \bullet Dual-input 200, 100 or 60 MHz bandwidth
- Up to 2.5 GS/s real-time sampling and 3k points memory per input
- Automatic and advanced triggering functions. Connect&View, Pulse width, Dual Slope and N-Cycle for synchronizing on specific waveform details.
- Fast Fourier Transform (FFT) for Frequency domain, spectrum display of signal harmonics or fidelity (190C)
- Digital Persistence for analyzing complex dynamic waveforms like on an analog scope (190C)
- Automatic capture and replay of 100 screens
- 27,500 points per input record length using ScopeRecord mode
- TrendPlot paperless chart recorder for trend analysis up to 22 days
- · Waveform reference for visual comparisons and automatic pass/fail testing (190C) of waveforms
- Five hours rechargeable NiMH battery pack

	190C Series ScopeMeter		190B S	190B Series ScopeMeter			120 Series ScopeMeter	
	Fluke 199C	Fluke 196C	Fluke 199B	Fluke 196B	Fluke 192B	Fluke 124	Fluke 123	
Bandwidth	200 MHz	100 MHz	200 MHz	100 MHz	60 MHz	40 MHz	20 MHz	
Sample rate	2.5 GS/s	1 GS/s	2.5 GS/s	1.0 GS/s	0.5 GS/s	25 MS/s	25 MS/s	
Display	Full Color LCD Monochrome LCD							
FFT analysis	Y	es		No		No		
Persistence	Digital with v	ariable decay		On/Off		No		
Waveform compare			Yes			No		
Pass/fail testing	Y	es		No		No		
Input sensitivity	2 mV/div to	o 100 V/div	5	mV/div to 100 V/	div	5 mV/div to 500 V/div		
Replay								
Automatic capture of 100 screens	Yes			No				
Recorder								
ScopeRecord (27500 Min/Max points)		Up to 48 hours			N	Io		
TrendPlot (13500 Min/Max/Avg points)	Up to 22 days			16 days				
Meter								
5000-Count True-rms DMM	Single isolated input			Dual				
Other								
Cursors	Yes			Yes	No			
Zoom	Yes			No				
Floating inputs (max. V between earth ground and any terminal)	1000 V CAT II / 600 V CAT III		600 V CAT III					
Independently isolated inputs		1000	V CAT II / 600 V	CAT III		No		
Battery	4 hour Ni-MH			7 hour Ni-MH 5 hour Ni-MH				





Fluke 123/124/125

- Dual input 20, 40 MHz
- digital oscilloscope
 Two 5,000-count True-rms digital multimeters
- Dual-channel TrendPlot recorder
 Connect-and-View™ trigger simplicity for hands-off operation
- Optically isolated RS-232 interface
- · Single shielded test leads for all functions
- Cursors (124)
- 20 save setups and screens (124)
- 7 hours battery operation (124)

Fluke. Keeping your world up and running.®

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